

REMARKS

Claims 1-35 and 39-83 are pending in the current application. In response to the Restriction Requirement issued on October 2, 2002, Applicants provisionally elected to prosecute claims 1-16, 22-24, 32-32, 36-38, 43, 80, 82 and 83. In the Office Action issued on June 26, 2003, the Examiner further withdrew claims 22-24, 80, 82 and 83 as being drawn to the non-elected invention. In response, Applicants submitted an Amendment on October 27, 2003, amending claims 1-4, 7, 12, 13 and 15. By way of the Amendment submitted by Applicants on January 14, 2005, claims 36-38 were cancelled. By way of the Amendment submitted by Applicants on November 30, 2005, Applicants amended claims 1-4 and 43.

By way of the present Amendment, Applicants have amended claims 1-5, 9, 12, 13, and 43, and cancelled claims 17-31, 34-42 and 44-83. No new matter has been added by way of these amendments.

As a preliminary matter, Applicants express their gratitude for the Examiner's comments and suggestions related to claim amendments required in order to obtain allowance of the pending claims.

Withdrawal of Previously-Levied Rejections and Objections to the Claims

Applicants note that the Examiner has withdrawn any rejection or claim objection not expressly repeated in the instant Office Action.

Cancellation of Withdrawn Claims

As suggested by the Examiner in the instant Office Action, Applicants hereby cancel the "withdrawn" claims, in anticipation of allowance of the pending claims.

Rejections Under 35 U.S.C. § 112, First Paragraph ("enablement rejection")

The Examiner rejected claims 1-11, 32 and 43 under 35 U.S.C. § 112, first paragraph, as not being adequately enabled. In particular, it is the Examiner's view that the rejected claims – while being enabled for a nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO:1, or 98% or 99% identity with SEQ ID NO:1, encoding a polypeptide which has the ability to bind an FGF receptor and increase phosphate transport – are not enabled for a nucleic acid molecule which encodes a polypeptide that can "alter phosphate transport."

Applicants, while not necessarily agreeing with the Examiner's reasoning, amend the claims herein. Specifically, Applicants have amended the claims to more specifically recite that the encoded polypeptide has the property of "increasing" phosphate transport. Applicants note that these claim amendments reflect the amendments proposed by the Examiner in the Office Action, indicated by the Examiner as amendments that would serve to overcome the claim rejections set forth above. Support for these amendments can be found throughout the specification, for example, in Experimental Examples 1 and 4.

Accordingly, Applicants respectfully submit that the Examiner's rejections have either been overcome or rendered moot, and request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner rejected claims 1-16, 32, 33 and 43 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. The Examiner raises several issues, including the term "FGF23" recited in claims 1-4 and 12, the biological deposit referenced in claim 5, nucleic acid construct language in claim 9, and various grammatical errors in claims 1, 2, 3, 12 and 13. Also, the Examiner alleges that the polypeptide tag language is indefinite in "claim 5." However, claim 5 does not contain polypeptide tag language. Inasmuch as the Examiner's rejection applies to claim 8, which contains polypeptide tag language, Applicants address this language in claim 8 below.

Applicants have corrected the above-listed indefiniteness issues, including removal of the term "FGF23" from the respective claims, addition of the sequence identifier "SEQ ID NO:1" to claim 5, deletion of the term "specify" from claim 9, amendment of the polypeptide tag claim language in claim 8, and correction of the grammatical errors in claims 1, 2, 3, 12 and 13 as pointed out by the Examiner. These amendments were based largely on the Examiner's proposed claim amendments, as set forth on page 7 of the instant Office Action. It is Applicants' understanding, based on the Examiner's comments, that these amendments should serve to overcome all of the Examiner's outstanding indefiniteness rejections.

Accordingly, Applicants respectfully submit that amended claims 1-5, 9, 12, 13 and 43, and dependent claims 6-8, 11, 14, 15, 32 and 33, are not indefinite, and request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 102(b)

Claims 12 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Mahairas et al. (1999, Proc. Natl. Acad. Sci. U.S.A. 96: 9739-9744).

Applicants submit that the amendments to claims 12 and 13, as described herein, serve to overcome the Examiner's rejection. Specifically, Applicants have amended claims 12 and 13 to more specifically recite the claimed sequences. These amendments are in accordance with the amendments proposed by the Examiner in the instant Office Action. It is also Applicants' understanding that it is the Examiner's view that these amendments should serve to overcome the Examiner's anticipation rejections.

Accordingly, Applicants respectfully submit that the amended claims are not anticipated by the Mahairas reference, and request the Examiner's reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b).

Summary

Applicants respectfully submit that the claims are fully supported in the specification as filed, and that no new matter has been added by way of the present Amendment.

Favorable examination and allowance of the pending claims is hereby requested.

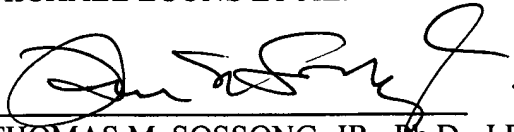
The Examiner is invited to contact Applicants' representative if anything in this response requires clarification.

Respectfully submitted,

MICHAEL ECONS ET AL.

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(Date)

By:


THOMAS M. SOSSONG, JR., Ph.D., J.D.
Registration No. 48,463
DRINKER, BIDDLE & REATH, LLP
One Logan Square
18th and Cherry Streets
Philadelphia, PA 19103-6996
Telephone: (215) 988-2700
Direct Dial: (215) 988-2562
Facsimile: (215) 988-2757
E-Mail: thomas.sossong@dbr.com
Attorney for Applicants